

ABSTRACT OF THE DISCLOSURE

A method of fabricating a colossal magneto-resistive detector using a thin film transfer method includes the use of a perovskite oxide material as a substrate, and a rock salt structure material as a buffer layer, template layer, and release layer. Advantages associated with the method include not only the ability to produce a detector of the requisite film quality, but one which satisfies the temperature coefficient of resistance and fabrication temperature constraints. In addition, when employed as either the substrate or the buffer layer, template layer, and release layer, after bonding the rock salt structure material can be easily removed using water, and the excess rock salt structure material/water solution can then be removed with known techniques.